

ABSTRACT

A nonvolatile data storage circuit has a data holding circuit having a storage node, and a plurality of ferroelectric capacitors one electrodes of which are connected to the storage node. In this nonvolatile data storage circuit, in store operations to write data from the data holding circuit to the ferroelectric capacitors, the timing of at least the rising or the falling of plate signals supplied to the other electrodes of the plurality of ferroelectric capacitors, is made different. During store operation, the timing of the plate signals applied to the plurality of ferroelectric capacitors connected to the storage node is shifted, so that coupling noise between the ferroelectric capacitors is dispersed and can be reduced, and data inversion of the data holding circuit can be prevented.